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Principal: Mrs C Stanyer

Subject: Mathematics

Year 10 Curriculum Map 2024 - 25

Week Commencing	Topic (including links to additional resources)	Assessment Window
Staff INSET 02/09 Students Return 03/09	<p>Numerical Skills Properties of number, equivalent FDP, calculations, estimations and accuracy, standard form.</p> <p><i>Higher tier:</i></p> <ul style="list-style-type: none"> • Prime factorisation • Negative, fractional and zero powers • Surds • Recurring decimals • Error intervals • Bounds and limits of accuracy • Calculator and non-calculator standard form 	
09/09/2024	<p><i>Crossover tier:</i></p> <ul style="list-style-type: none"> • HCF and LCM from lists • Prime factorisation • Negative, zero and unit fraction powers • Converting fractions, decimals and percentages • Comparing ratios • Simplifying fractions • Written calculations with number • Written calculations with fractions • Rounding to given place values • Rounding to significant figures • Estimation • Error intervals 	
16/09/2024	<p><i>Foundation tier:</i></p> <ul style="list-style-type: none"> • Place value • Ordering directed numbers and decimals • Multiples, factors and primes • Square numbers, cube numbers and roots • Prime factorisation • Converting fractions, decimals and percentages • Comparing ratios • Simplifying fractions • Written calculations with number • Written calculations with fractions • Rounding to given place values • Rounding to significant figures • Estimation 	<p>1 – 2 teacher marked learning checkpoints</p> <p>2 student marked learning checkpoints</p>
23/09/2024		
30/09/2024		

Ormiston Meridian Academy is committed to safeguarding and promoting the welfare of children and young people and expects all staff and volunteers to share this commitment.



07/10/2024	<p>Algebraic Skills Expressions, formulae, sequences</p> <p><i>Higher tier:</i></p> <ul style="list-style-type: none"> • Expanding double and triple brackets • Factorising expressions into single and double brackets • Factorising monic and non-monic quadratics • Algebraic fractions • Algebraic proof • Substitution • Changing the subject of any formula • SUVAT formulae • Nth term of linear sequences • Nth term of quadratic sequences • Fibonacci sequences • Geometric progressions 	
14/10/2024	<p><i>Crossover tier:</i></p> <ul style="list-style-type: none"> • Algebraic simplification • Collected like terms • Expanding single brackets • Factorising into single brackets • Expanding double brackets • Factorising monic quadratics • Function machines • Substitution • Changing simple subjects • SUVAT formulae • Diagrammatic and numerical sequences • Continuing sequences • Nth term of linear sequences • Fibonacci sequences 	<p>3 teacher marked learning checkpoints</p> <p>1 student marked learning checkpoint</p>
21/10/2024	<p><i>Foundation tier:</i></p> <ul style="list-style-type: none"> • Algebraic simplification • Collected like terms • Expanding single brackets • Factorising into single brackets • Expanding double brackets • Simple function machines • Substitution • Changing simple subjects • Diagrammatic and numerical sequences • Continuing sequences • Nth term of linear sequences 	<p>Achievement Round 1</p>
October Half Term		

04/11/2024	<p>Ratio and proportion <i>Higher tier:</i></p> <ul style="list-style-type: none"> • Writing and using ratio in the form 1 : n • Combined ratios • Sharing into complex ratios • Worded direct and inverse proportion • Proportional equations • Best buys • Recipes 	Achievement Round 1
11/11/2024	<p><i>Crossover tier:</i></p> <ul style="list-style-type: none"> • Writing and simplifying ratio • Writing and using ratio in the form 1 : n • Simplifying ratio with mixed units • Sharing into ratio • Comparison with ratio • Worded direct and inverse proportion • Simple proportional equations • Best buys • Recipes • Direct proportion graphs • Currency conversion 	
18/11/2024	<p><i>Foundation tier:</i></p> <ul style="list-style-type: none"> • Writing and simplifying ratio • Writing and using ratio in the form 1 : n • Simplifying ratio with mixed units • Sharing into ratio • Best buys • Recipes • Direct proportion graphs • Currency conversion 	2 teacher marked learning checkpoints 1 student marked learning checkpoint
25/11/2024	<ul style="list-style-type: none"> • Writing and simplifying ratio • Writing and using ratio in the form 1 : n • Simplifying ratio with mixed units • Sharing into ratio • Best buys • Recipes • Direct proportion graphs • Worded direct and inverse proportion • Currency conversion 	
02/12/2024	<p>Percentages <i>Higher tier:</i></p> <ul style="list-style-type: none"> • Uses of percentage multipliers • Percentage increase and decrease • Simple interest • Compound interest • Percentage change • Original amounts (reverse percentages) • Non-calculator methods for percentage change • Exponential growth and decay 	
09/12/2024	<p><i>Crossover tier:</i></p> <ul style="list-style-type: none"> • Percentage increase and decrease • Simple interest • Compound interest • Percentage change • Original amounts (reverse percentages) • Non-calculator methods for percentage change 	2 teacher marked learning checkpoints 1 student marked learning checkpoints
16/12/2024	<p><i>Foundation tier:</i></p> <ul style="list-style-type: none"> • Percentage increase and decrease • Simple interest • Compound interest • Percentage change 	
Christmas Break		

06/01/2025	Equations and inequalities Linear equations, quadratic equations, inequalities, simultaneous equations, iterative processes <i>Higher tier:</i>	
13/01/2025	<ul style="list-style-type: none"> • Solving ranges of linear equations using balancing. • Form and solve equations in context. • Solving algebraic fractions. • Solve quadratic equations by factorising. • Solve quadratic equations by completing the square. • Solve quadratic equations by graphs. • Solve quadratic equations by quadratic formula. • Solve linear inequalities. • Solve quadratic inequalities. 	
20/01/2025	<ul style="list-style-type: none"> • Represent linear inequalities on a number line. • Represent linear inequalities graphically. • Solve linear simultaneous equations by elimination. • Solve linear simultaneous equations by graphs. • Solve non-linear simultaneous equations. • Use iterative formulae to solve equations. • Use decimal search to solve equations. 	3 teacher marked learning checkpoints 2 student marked learning checkpoints
27/01/2025	<i>Crossover tier:</i> <ul style="list-style-type: none"> • Solving linear equations. • Forming and solving linear equations. • Solving equations with non-integer values. • Solving quadratic equations by factorising. • Solving quadratic equations using graphs. • Solve linear inequalities. • Represent linear inequalities on a number line. • Solve linear simultaneous equations by elimination. • Solve linear simultaneous equations by graphs. 	
03/02/2025	<i>Foundation tier:</i> <ul style="list-style-type: none"> • Solving linear equations. • Forming and solving linear equations. • Solve linear inequalities. • Represent linear inequalities on a number line. • Solve simple simultaneous equations. 	
10/02/2025		Achievement Round 2
February Half Term		

24/02/2025	Angle reasoning <i>Higher tier:</i> <ul style="list-style-type: none"> • Angles on parallel lines • Angles in polygons • Bearings • Circle theorems 	Achievement Round 2
03/03/2025	<i>Crossover tier:</i> <ul style="list-style-type: none"> • Basic angle facts • Angles on parallel lines • Angles in polygons • Bearings 	2 teacher marked learning checkpoints
10/03/2025	<i>Foundation tier:</i> <ul style="list-style-type: none"> • Basic angle facts • Angles on parallel lines • Angles in polygons • Bearings 	0 student marked learning checkpoints
17/03/2025	Congruency and similarity <i>Higher tier:</i> <ul style="list-style-type: none"> • Translations • Rotations • Reflections • Enlargements with positive scale factors • Enlargements with negative scale factors • Linear similarity • Proving congruent triangle pairs • Area and volume similarity • Repeated transformations. 	1 teacher marked learning checkpoint
24/03/2023	<i>Crossover tier:</i> <ul style="list-style-type: none"> • Translations • Rotations • Reflections • Enlargements with positive scale factors • Linear similarity 	0 student marked learning checkpoints
31/03/2025	<i>Foundation tier:</i> <ul style="list-style-type: none"> • Translations • Rotations • Reflections • Enlargements with positive scale factors • Linear similarity 	
07/04/2025	<ul style="list-style-type: none"> • Translations • Rotations • Reflections • Enlargements with positive scale factors • Linear similarity 	
Easter Break		

28/04/2025	Triangle measures Expressions, formulae, sequences <i>Higher tier:</i>	
05/05/25	<ul style="list-style-type: none"> • Pythagoras' Theorem • Right-angled triangle trigonometry • Pythagoras' and trigonometry in 3D • Exact trigonometric values • Sine and cosine rule • Sine rule for area of triangles 	1 teacher marked learning checkpoint
12/05/2025	<i>Crossover tier:</i> <ul style="list-style-type: none"> • Pythagoras' Theorem • Right-angled triangle trigonometry 	0 student marked learning checkpoints
19/05/2025	<i>Foundation tier:</i> <ul style="list-style-type: none"> • Pythagoras' Theorem • Right-angled triangle trigonometry 	
May Half Term		

02/06/2025	<p>Statistics Discrete data, bivariate data, continuous data</p> <p><i>Higher tier:</i></p> <ul style="list-style-type: none"> • Averages from tables • Reverse means • Comparing data • Pie charts • Scatter graphs • Histograms • Box plots • Cumulative frequency diagrams • Time-series diagrams • Stem and leaf diagrams • Capture-recapture 	<p>1 teacher marked learning checkpoints</p> <p>2 student marked learning checkpoints</p>
09/06/2025	<p><i>Crossover tier:</i></p> <ul style="list-style-type: none"> • Averages from lists • Averages from tables • Reverse means • Comparing data • Pie charts • Scatter graphs • Bar charts • Time-series diagrams • Stem and leaf diagrams 	Year 10 Mock Exams
16/06/2025	<p><i>Foundation tier:</i></p> <ul style="list-style-type: none"> • Averages from lists • Averages from tables • Comparing data • Pie charts • Scatter graphs • Bar charts • Time-series diagrams • Stem and leaf diagrams 	Year 10 Mock Exams
23/06/2025	<ul style="list-style-type: none"> • Averages from lists • Averages from tables • Comparing data • Pie charts • Scatter graphs • Bar charts • Time-series diagrams • Stem and leaf diagrams 	Year 10 Mock Exams
30/06/2025	<p>Constructions Expressions, formulae, sequences</p> <p><i>Higher tier:</i></p> <ul style="list-style-type: none"> • Construct perpendicular lines • Construct angle bisectors • Loci 	Year 10 Mock Exams
07/07/2025	<p><i>Crossover tier:</i></p> <ul style="list-style-type: none"> • Construct perpendicular lines • Construct angle bisectors • Loci 	<p>1 teacher marked learning checkpoint</p> <p>0 student marked learning checkpoints</p>
14/07/2025	<p><i>Foundation tier:</i></p> <ul style="list-style-type: none"> • Construct perpendicular lines • Construct angle bisectors • Loci 	
21/07/2025	<ul style="list-style-type: none"> • Construct perpendicular lines • Construct angle bisectors • Loci 	